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New Normal: The Future Curriculum Development in Education

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Abstract
The purpose of this study was to conduct a needs analysis concerning the future of curriculum development in education. A mixed-methods study was conducted with a sequential exploratory research design, where the qualitative data were collected first followed by the quantitative data. As a needs analysis was undertaken in this research, the Delphi technique, one of the techniques for determining needs, was employed in this study. In the first stage of the three-stage Delphi technique, an open-ended question was directed to curriculum development experts. The qualitative data were analyzed using a content analysis method under four themes, Design, Development, Implementation, and Evaluation. In the second stage, a questionnaire was prepared based on the resultant findings and experts were asked whether they agreed with the questionnaire items. After analyzing the questionnaire data using central tendency measures, the second stage was initiated to determine whether there were differences in their views regarding the same questionnaire items. As a result of these procedures, first, the views of experts were obtained on the future of curriculum development and then the quantitative data were collected. Finally, the collected data were analyzed together. Under the design stage of curriculum development, the study findings suggested creating curriculum drafts based on the needs analyses, skills, and abilities and ensuring their suitability to digital platforms. Under the development stage, the results suggested preparing curriculum with interdisciplinary approaches that value student-centered practices, skills, values, and activities. The implementation stage included inclination towards practices such as creating digital content and guiding towards social accountability projects that eliminate the disadvantages of distance education. Lastly, the evaluation stage included effective use of digital platforms, taking safety precautions, and providing counselling services.

Keywords: Distance Education, Curriculum Development, Curriculum, Needs Analysis, Delphi Technique

1. Introduction

1.1 Introduce the Problem

The developing and evolving technology promotes societies, individuals, and institutions by changing their

structures. These changes stem from the needs drive experienced by people. Throughout centuries, people have needed many elements, and these needs have caused new structures and systems to take shape. As such, the needs arise from the challenges in people's lives. People have built houses because of their needs for shelter, hunted for their needs for food, and created new states and forms of government for their needs to maintain order. Education, on the other hand, is a structure that emerges from people's needs for knowledge. As a result of transferring knowledge from generation to generation using various methods, human beings have been able to sustain their existence in the world (Sarı, Yunus Emre, 2019). Open and distance education has gained significance with the needs of countries to meet the educational needs of individuals (Gökmen et al., 2016).

Distance education, which has become more practical to use with the developing technology, provides convenience to many students and teachers today (Aksüt, 2020). People suffer from great time issues because of the changing world order. Therefore, they may show more inclination towards distance education in the near future, even if there is no disaster (Uyar, 2020).

Today, conditions are prone to change along with new events. The Covid-19 pandemic is one of these unexpected events which has started controlling the world (TIME, 2021). This event caused the future plans to change and the education and working process to continue from home (Salari et al., 2020). In this period, seen as the information age, education has become the key element of fundamental transformation and change, making its presence felt in every field (Salari et al., 2020; Wong, 2003; Örs et al., 2013; Doğan, 2019). For instance, when computer and internet technologies were unavailable, people created classroom environments for centuries and offered education in these settings, sharing the same physical environments (Karasu & Sarı, 2019). Demands for education have increased in the rapidly developing society with industry, whereby face-to-face education and traditional learning methods have become insufficient to meet society's needs. The history of humanity has witnessed major ruptures affecting societies in different periods, and innovations brought by these pursuits have led to changes and transformations by affecting societies in different ways (Karakaş, 2020). Technology has caused a rapid change and transformation between societies and is one of the primary factors that has led to these changes (Çalışkan & Özbay, 2015).

In addition to discussing the effect of the pandemic on technologization and digitalization in education, we could also discuss its effects on society. The concept of social change could be defined as the transition process of any group, organization, community, or society in the world from one form to another (Çalışkan, 2018). According to this definition, the effects of mass changes in society on education are inevitable. Education, one of the elements that make up the social structure, is inseparable from the changes taking place in other parts (Özdemir, 2011). This is because society and education are two structures that complement and change each other. These changes in education and society are two-way, that is, reciprocal (Çalışkan, 2018). While changes in education affect society, changes in society also affect education (Çalışkan, 2018). Considering that the pandemic had a greater impact on society, education is inevitably affected by this change. Hence, the education system should adapt to this change under process (Vahap, 2003). This change once again reveals the importance and function of educational institutions (Aslan, 2001). In conditions that unfolded with the pandemic, many studies have been conducted considering variables such as teachers, students, and parents in distance education (Gökbulut, 2021; Williams et al., 2021; Reguera et al., 2021; Perez-Lopez et al., 2021). By taking a look at all these studies, we can observe many changes in practices, student profiles, and perceptions. In this process we are experiencing, the only way educational institutions, whose function in terms of education has reached a much more important point, could adapt to these changes is to develop curriculum per requirements and adequacies of the process.

Conducting a needs analysis under these objectives becomes imperative in education. Needs analyses in education are consistent and detailed planning to achieve the outcomes that should be realized by the end of an educational process (Thoha & Al Mufti, 2020; Çeliköz, 2004). Based on these requirements, there will be many changes in curriculum development practices in education in current and future times. The views and suggestions of curriculum development experts in this regard are of primary significance in terms of changes that may occur in the curriculum development process. This study also aims to carry out a needs analysis concerning how curriculum development should be in education in near future. In the meantime, issues such as the limited access of many students to distance education in the world (UNESCO, 2021), how digital technologies can be

used effectively in education (Husaj, 2020), how to support students in current crisis periods and how to help students facing obstacles (Frumos, 2020) have become the current perspectives of today's education in the world. This study also aims to reveal the views and suggestions of experts regarding how the curriculum development process could be shaped in distance education considering the experiences gained in this period and the past knowledge.

This research aimed to conduct a needs analysis through the Delphi technique about how curriculum development should be in education in near future, owing to the reflection of developments in science and technology and changes in current processes on education. Considering the literature, studies carried out on this subject are significant in terms of predicting the near future (Vare et al., 2019). Per this objective, the problem statement of the research was determined as: How should curriculum development in distance education be in near future according to the views of curriculum development experts? Based on this question and aim, answers were sought to the following questions.

1) How should be the curriculum development in distance education in near future according to the views of curriculum development experts in education?
2) How should be the design stage of curriculum development in distance education?
3) How should be the development stage of curriculum development in distance education?
4) How should be the implementation stage of curriculum development in distance education?
5) How should be the evaluation stage of curriculum development in distance education?

2. Method

This research is a mixed-methods study. One of the reasons why mixed-methods research is preferred is that qualitative and quantitative research alone could be insufficient to understand the scope of a subject, and therefore, by combining two qualitative and quantitative data sources, the problem could be viewed from a broader perspective (Creswell, 2021). Of mixed-methods research designs, an exploratory sequential mixed-methods research design was used. The exploratory sequential mixed-methods study is defined as a research design in which the qualitative data is explored first and then the collected data are used in the quantitative dimension (Creswell, 2013). In this study, qualitative data were collected by asking an open-ended question to curriculum development experts through a Delphi technique. After analyzing the qualitative data, the quantitative data were collected using a questionnaire created based on the qualitative data to collect the quantitative data. After collecting the qualitative and quantitative data, the resultant findings were examined from a holistic perspective. A needs analysis was carried out in accordance with the subject of the research. Besides being a tool, the needs analysis is used to make more accurate decisions about a topic under investigation (Şahin et al., 2018). Of needs analysis techniques, the Delphi technique was used in this research. The decision-making process of decision-makers in education, often carried out by political and emotional decision-making, can allow experts to make better decisions using the Delphi technique (Vare et al., 2019; Şahin, 2001). Delphi technique has limitations, which may lead to some disruptions and problems in the process. These multiple procedural steps make it difficult to keep participants in the process. Considering these disadvantages, Şahin (2001) stated that a group of at least seven experts is adequate. As such, more than seven experts were reached by taking these limitations into consideration. A general view of the study is given in (Figure 1).
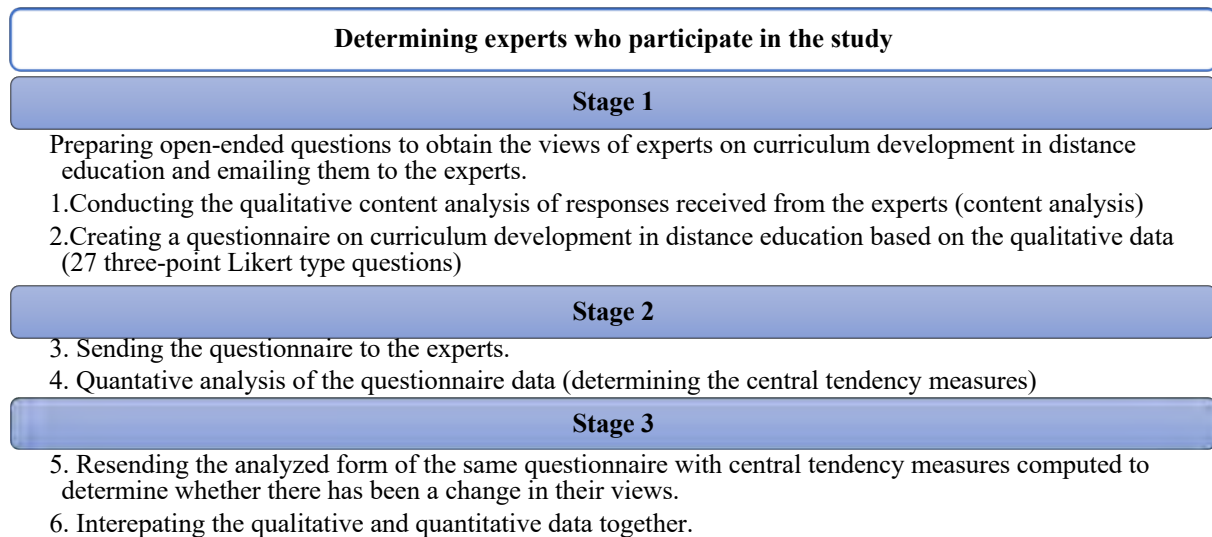
Determining experts who participate in the study

Stage 1

Preparing open-ended questions to obtain the views of experts on curriculum development in distance education and emailing them to the experts.
1. Conducting the qualitative content analysis of responses received from the experts (content analysis)
2. Creating a questionnaire on curriculum development in distance education based on the qualitative data (27 three-point Likert type questions)

Stage 2

3. Sending the questionnaire to the experts.
4. Quantative analysis of the questionnaire data (determining the central tendency measures)

Stage 3

5. Resending the analyzed form of the same questionnaire with central tendency measures computed to determine whether there has been a change in their views.
6. Interepating the qualitative and quantitative data together.

Figure 1: A General Overview Of The Study

2.1 Participant Characteristics

The study group of this research consisted of curriculum development experts from three universities in Turkey. Of purposive sampling methods, expert and convenient sampling techniques were employed when selecting the experts comprising the study group. Expert sampling is a sampling technique used when one needs to collect data from individuals with expertise on the topic selected for research (Oral & Çoban, 2020). The demographic information of study participants is presented in (Table 1).

Table 1: Demographic Information of Participants

University	Department	Participants	Title
Two Universities in Mediterranean Region	Curriculum and Instruction	9	3 Prof. Dr. 5 Associate Prof. Dr. 1 Dr. Faculty Member
One University in Black Sea Region	Curriculum and Instruction	1	1 Associate Prof. Dr.
Total		**10**	

2.2 Data Collection Tool

An open-ended question prepared by researchers was used as a data collection tool in the study. Experts were asked to answer a comprehensive open-ended question regarding the curriculum development process in distance education. The qualitative data obtained from this question were subjected to content analysis, interpreted, and turned into a questionnaire by the researchers to interpret the views of experts quantitatively. In other words, a sequence was followed from qualitative to quantitative data. At the same time, it also formed the stages of the Delphi technique. The questionnaire was submitted for expert opinions and became ready for use. The content analysis of the open-ended question used in the research enabled both preparing a questionnaire and reaching the qualitative findings that would create data in answering each sub-research questions.

2.3 Validity and Reliability

In order to increase the validity of the research, questions prepared were evaluated by 3 researchers who were experts in the subject before they were applied, and they were applied after the necessary improvements were made according to the suggestions made. In order to increase the reliability in the analysis of the data, the codes were checked by different researchers and a code list was created by reaching a consensus.

2.3.1. Research Ethics

The data in the study were collected on a voluntary basis. Instructors were reminded that they could terminate the research process at any time. In addition, no information that would disclose the identity of the participants was included. In addition, since the research is not an applied study, it does not have a dimension that will negatively affect the participants physically or psychologically.

2.4. Analysis of Data

Below is a detailed description of the data collection process and the implementation of the Delphi technique.

First Delphi Stage

10 curriculum development experts participated in the first stage of the Delphi technique. For this stage to be successful, at least 60% of participants should express their opinions (Turan et al., 2021). In this study, all ten people invited presented their views. In the first stage, the following open-ended question regarding the views of participants about the near future of curriculum development in education was emailed to 10 experts: How do you think the curriculum development process in distance education should be in near future, assuming that there has been a social impact with the rapid transition to distance education in the current pandemic process? (Please provide your comments in terms of design, development, implementation, and evaluation stages of curriculum development). Responses received from the experts were examined, converted to short sentences without changing their original meanings, and content-analyzed by the researchers. To ensure the validity and reliability in content analysis, the reliability coefficient of Miles and Huberman (1994) was used (Reliability = Consensus / (Consensus + Disagreement). As such, the reliability coefficient was 99.9 in the study.

Second Delphi Stage

The purpose of the second stage of Delphi is to create a questionnaire based on the data obtained in the first stage and to determine the agreement level of participants with these questionnaire items. Questionnaire items were prepared using the data obtained from the qualitative data analysis to implement the second stage of the Delphi technique, and two curriculum experts were asked for their opinions to test the internal consistency of the questionnaire. The questionnaire comprising 27 three-point Likert questions (1- Disagree; 2- Undecided; 3- Agree) was emailed to the participants. This way, the second Delphi stage came to an end. Measures of central tendency such as median, first quartile, third quartile, and range (R = range) were calculated for the views obtained after completing the second stage. The reason for computing the central tendency measures was to determine the level of consensus and disagreement (Şahin, 2001).

Third Delphi Stage

The third stage of the Delphi technique was completed with 10 participants. The results of the data collected in the second stage were prepared and resent to experts through emails, asking them to write down their views about whether their opinions have changed considering these values. The questionnaire sent in the third stage was the same in the second stage. However, while presenting this questionnaire, the median, first quartile, third quartile, and range values were also included, and what these values meant was explained at the top of the questionnaire. It was also emphasized that they should describe if their views have changed in the third round than responses they give in the second round, but skip them if there were no changes in views. According to Zeliff and Heldenbrand (1993), items with an interquartile range of less than 1.2 are considered acceptable. The survey could be repeated two, three, and even ten times to ensure mobility towards consensus. In this study, it was evaluated in three stages, as the consensus among the experts was high, which remained unchanged in both stages.

3. Results

To answer the first sub-research question in the first phase of the study, the views of experts were collected using the Delphi technique, and responses given to the open-ended question were examined through content analysis.

Themes and codes were determined and the frequency values of experts' responses relating to each code were computed and tabulated. The content analysis results are illustrated using a concept map given in (Figure 2).

Themes	Codes
Design	Skills like leadership, cooperation, creativity, effective communication, emotional intelligence, entrepreneurship, global citizenship, teamwork, and problem-solving abilities should be promoted and guaranteed (f 7).
	Establishing technical equipment and infrastructure (f 7)
	Determining the learner profile very well (f 6)
	Determining student interest and needs (f 5)
Development	Expanding the scope of skills and values in the curriculum (f 10)
	Giving more space to student-centered course designs (f 7)
	Opting for an interdisciplinary approach (f 6)
Implementation	Producing digital content that makes students active and creating units for digital content (f 9)
	Establishing technical and technological counseling centers (f 8)
	Increasing project activities (f 7)
	Ensuring exam security in the digital environment (f 6)
	Open courses should be more common in social media, and monitoring institutions should be widespread (f 6)
	Using digital media for workshops and reports within the scope of evaluation (f 6)
	Providing enrichment in presenting learning opportunities (Doing activities such as virtual classes and activity rooms) (f 5)
	Providing in-service training to teachers regarding distance education and increasing the diversity of current training programs (f 5)
	Preparing practices that increase social activities (e.g., special days, corporate belongingness) (f 5)
	Taking into account the formative assessment and providing timely feedback (f 3).
Evaluation	Obtaining the views of teachers, students, and parents continually (f 10)
	Increasing scientific studies using different research methods and designs (f 8)

Figure 2: Content Analysis of the First Stage of Delphi

As shown in Figure 2, per responses that participants provided considering the stages of the curriculum development process, codes were created and each code was combined under four categories (Design, Development, Implementation, and Evaluation). Participants emphasized that having sufficient technological infrastructure and equipment is imperative in the design process of curriculum development. Considering other items, taking student interest and needs into consideration is also of great significance. In the development category, all participants stated that the scope of skills and values that must be included in the curriculum should be expanded. However, in the implementation stage, they mostly emphasized the significance of making digitalized content prevalent alongside the process and creating units where these contents will be produced. These statements are followed by "increasing the variety of in-service training provided within the scope of distance education to teachers." In the evaluation category, all participants suggested constantly obtaining the views of education stakeholders, namely teachers, students, and parents, and increasing studies using rich methods.

To implement the second stage of the Delphi technique, the questionnaire, created based on content analysis, was sent to the experts and the central tendency measures of the data obtained from the questionnaire were computed and presented in (Table 2).

Table 2: Median, First Quartile, Third Quartile, and Range Values of Responses Given by the Experts to Questionnaire Items

Q1	Median	Q3	R	Item
3	3	3	0	1- Working groups should be formed using an interdisciplinary approach during the curriculum design process.
3	3	3	0	2- Conducting needs analyses (students, teachers, parents, and administrators) in curriculum design processes in schools able to carry on with distance education should be given importance.
3	3	3	0	3- Preparing objectives, learning outcomes, and contents in the context of attitudes and values in the curriculum designed (effective technology utilization, time management, accountability, study skills, higher-order thinking skills, and self-directed learning) should be given importance.
3	3	3	0	4- Skills involving student and teacher activities and especially socialization in digital environments and psychological impacts that the pandemic added to our lives (patience, coping with loneliness…) should be included during the design process.
2.75	3	3	0.25	5- Social analyses of developments experienced amid the pandemic should be reflected in the curriculum during the design process.
3	3	3	0	6- In order to support teachers, units where they can take part in creating course content should be created.
2	2	3	1	7- Little room should be given to old habits when preparing teaching materials.
3	3	3	0	8- Course content should be planned in such a way that makes students active and digital content should be created in this regard.
2.75	3	3	0.25	9- The contents on the EBA platform should be enriched.
2.75	3	3	0.25	10- The variety of instructional technologies should increase.
3	3	3	0	11- Research-based classrooms like flipped classrooms should be created.
2	2	2.25	0.25	12- Online education provided by institutions such as education academies and famous educators, who are expert in their fields, should start getting more popular and people should turn to individual education.
3	3	3	0	13- Infrastructure should be well established.
3	3	3	0	14- Utilization of student-centered approaches, methods, and techniques regarding teaching-learning processes will gain significance.
3	3	3	0	15- More practical activities should be included in learning-teaching processes to support social activities.
2	2	3	1	16- Considering the financial and technical infrastructures of countries in the world, one should not expect that distance education will become the only option in low-income countries.
3	3	3	0	17- Counseling centers should be established for students and teachers.
3	3	3	0	18- Ensure that the curriculum designed represents all segments of society (urban-rural) and is implemented accordingly.
3	3	3	0	19- The variety of in-service training relevant to the curriculum designed should be increased.
2.75	3	3	0.25	20- Cooperation should sustain between group teachers that suits digital platforms.
3	3	3	0	21- Formative and authentic product-based assessments should be prioritized.
2.75	3	3	0.25	22- Measurements and evaluations should be carried out through a mixed system, with face-to-face exams included.
3	3	3	0	23- Works done for the security of exams held in digital environments should increase.
3	3	3	0	24- Obtaining the views of all stakeholders regarding the practices carried out within the scope of the designed program should be considered significant.
2.75	3	3	0.25	25- Meetings where digital media is used should be organized for evaluation activities.

Q1	Median	Q3	R	Item
2	3	3	1	26- It should be ensured that institutions taking part in monitoring online courses on social media platforms become prevalent.
1	2	2	1	27- It seems unlikely that measurement and evaluation processes are carried out entirely through online platforms in the future.

Table 2 shows values relating to statistical analyses (median, first quartile, third quartile, and range) conducted on data collected through the questionnaire. Considering the measures of central tendency, the experts have agreed generally with all items.

To implement the third stage of the Delphi technique, responses given to questionnaire items were evaluated and resent to the experts. In this process, measures of central tendency were also provided along with explanations. These analyses were conducted to determine whether the participants were sure about their decisions and whether there was a concordance between items. To ensure this concordance was met, the difference between the central tendency measures of medians and quartiles were examined, and small differences between quartiles (Q1-Q3) indicated consensus on items (R < 1.2). Table 3 shows the experts' consensus levels regarding items. Consensus values relating to responses the experts reconsidered are also shown in (Table 3).

Table 3: Central Tendency Values Relating to Responses Reconsidered by the Participants

Q1	Median	Q3	R	Item
3	3	3	0	1
3	3	3	0	2
3	3	3	0	3
3	3	3	0	4
2.75	3	3	0.25	5
3	3	3	0	6
2	2	2.25	0.25	7
3	3	3	0	8
2.75	3	3	0.25	9
2	3	3	1	10
3	3	3	0	11
2	2	2	0	12
3	3	3	0	13
3	3	3	0	14
3	3	3	0	15
2	2	3	1	16
3	3	3	0	17
3	3	3	0	18
3	3	3	0	19
3	3	3	0	20
3	3	3	0	21
2	3	3	1	22
2.75	3	3	0.25	23
3	3	3	0	24
2.75	3	3	0.25	25

Q1	Median	Q3	R	Item
2.75	3	3	0.25	26
2	2	2.25	0.25	27

As seen in Table 3, experts agreed on 27 out of 27 items (R < 1.2). For the analysis of the third stage of the Delphi technique, statistical analyses conducted in the second stage of Delphi were used. Moreover, it was examined whether the range between quartiles has decreased. When there was a decrease in ranges, it indicated that there was a consensus. Considering the range values of items, the interquartile range of 18 out of 27 items remained unchanged, but still a consensus was reached. In four out of nine items (7-9-12-20), range values decreased. In other words, there was an inclination toward consensus. Although the other five items (10-22-23-26-27) showed consistency with the equation of range value (R < 1.2), there was a negative inclination towards consensus. Figure 2 graphically illustrates the distribution of experts' concordance with opinions.
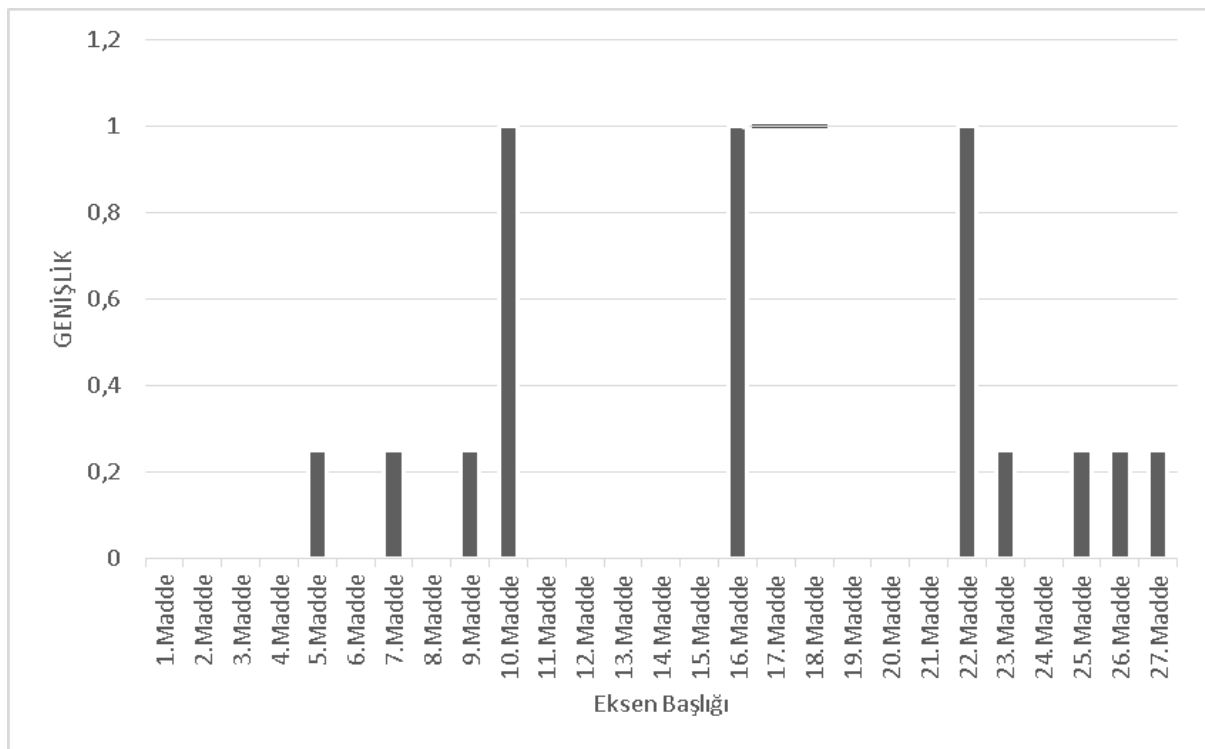

Figure 2: Distribution of Experts' Agreement with Opinions

A general evaluation of findings obtained through the Delphi technique indicated that experts had consensus and shared common opinions concerning curriculum development in distance education in near future.

The following findings were obtained based on these data and examining direct statements using content analysis and considering curriculum development stages. Opinions relating to the four stages of curriculum development given in sub-research questions were revealed through content analysis and described using the content analysis of responses given by experts to the semi-structured question.

Design Stage: Considering the items (1-5) relating to the design stage of the questionnaire presented to the experts (Table 2), there was a full consensus among experts per interquartile ranges of the first four items. In the meantime, some direct statements from the data collected from experts regarding the design stage are given below.

Exp1. *"Along with the developing and evolving technology, changes should also take place in the philosophy of education and include skills of upcoming centuries that students should acquire: leadership, entrepreneurship, empathy, digital qualification, and so forth. And, relevant curriculum has to be designed accordingly…"*

Exp3. *"Curriculum should be prepared in every field to educate individuals who directly feel and identify world problems, produce innovative thoughts for their solutions, and utilize right methods and techniques for solutions."*

Development Stage: An examination of items (6-13) regarding the development stage in the questionnaire administered showed that experts had reached a consensus on all items. However, though there was a consensus per interquartile ranges between items 7, 9, and 10, one cannot say that participants had a complete consensus. Some direct statements from the data collected from experts relating to the development stage are given below.
 Exp7. *"Personalized education should be developed based on an education system that is adaptable to students' capabilities and talents. The contents of education could also be enriched according to students' learning speeds and situations…. . The main theme of courses should focus on subject knowledge and experience."*
Exp10. *"...though different per individual characteristics, one should benefit from lectures, videos, tests, assignments, discussion platforms, and blocks in lessons. Course contents having digital infrastructure should be created and new approaches like flipped classrooms should be used."*

Development Stage: As per items (14-20) relating to the development stage in the questionnaire administered, experts reached a consensus on all items. However, although a consensus has been reached considering the interquartile range (R = 1) of item 16, one cannot say that participants had full consensus. Some direct quotations from the data collected from the participants regarding the implementation stage are given below.
Exp5. *"To have students acquire these abilities, utilization of approaches such as visual learning, personalized education systems, game and scenario-based learning, project-based problem-solving, and augmented reality will be necessary."*
Exp9. *"Education and learning activities should be conducted in different places, different times, and using different tools. A conception of education and learning everywhere and anytime should be dominant… Diversification and richness should be ensured while offering learning opportunities by using computer and internet technologies-based learning contents, materials, and learning environments besides printed, visual, and auditory learning content and materials."*

Evaluation Stage: An examination of items (21-27) relating to the evaluation stage in the questionnaire administered indicated that experts have reached a consensus on all items. Some direct quotations from the data collected from experts regarding the evaluation stage are given below.
Exp4. *"...question and answer practices should be abandoned now. Their knowledge should be measured and their abilities of putting knowledge into practice should be tested with their project performance throughout the learning process."*
Exp8. *"Student should be more independent during the learning process, get support from their peers. ...therefore, benefiting from peer education can make significant contributions to student achievement. As education can be carried out from distance, teachers and education institutions become more important for academic performance."*

4. Discussion

According to the resultant study findings, experts suggested conducting a comprehensive needs analysis of all education stakeholders in the design stage of the curriculum development process, diversifying skills and abilities required by the curriculum, providing sufficient resources in creating these contents used along with the digitalization, expanding the scope of in-service training provided to teachers, and ensuring the security and fairness of measurement and evaluation processes. Considering relevant studies in the literature, we may come across similar comments on how the process should take shape (Celik et all, 2022; Çalık & Sezgin, 2005; Arslangiray, 2019). Curriculum developers and educationalists also emphasize that new stakeholders, new thoughts, and new methods will stand out in developing this system, asumed to gain persistence. According to Çeliköz (2004), there should be a positive relationship between the realization of goals, one of the elements of curriculum, and conducting activities within the scope of a program throughout the education process. People may turn to different learning environments owing to the reflection of the data yielded by these needs analyses in applications and the efficiency assumed to increase through continuous development activities (Kılıç, 2011,

p.158). According to Türkoğlu (2003), considering all the events experienced in this process, the curriculum developed "should enable thinking, focus on problem-solving and improve discussion, enable mutual learning, be student-centered and controlled, promote active participation and knowledge construction, and contribute to the mission of education in democratic society by enabling thinking abilities and learning together."

According to the findings obtained in the development stage, the participants strongly emphasized that curriculum development should be based on an interdisciplinary approach. They stated that when forming the working groups, one should not only work with the curriculum development specialists but also with psychology, sociology, computer and instructional technologies specialists. As such, they suggested enriching the contents of the EBA (Education Information Network) platform. It was also concluded that the variety of the student-centered course designs created should be increased and even research-based practices like flipped classrooms should be put into practice. At the same time, suggestions on utilizing different digital platforms making students active, and increasing the effectiveness and variety in distance education systems using new software, applications, and online channels were in parallel to those in the literature (Başaran et al., 2020). According to Kaçan and Gelen (2020), considering that distance education has become so widespread, educational institutions and organizations should develop programs per individuals' interests and needs and provide the skills required by the current era and support lifelong learning when creating content. Vare et al. (2019) and Zeliff and Heldenbrand (1993) also reached similar findings, and these findings are therefore similar to those in the literature.

In the implementation stage, when the responses given by participants were examined, it was concluded that digitalization will increase in content production and with this increase, units creating digital content will be established in institutions. According to a study by Sezgin and Karabacak (2020), conducted in the field of higher education, it is important to create pages on official websites of universities offering documents, information, news, and authentic content that cover digital transformation and to establish an effective sharing space by taking notice of user feedback and doing necessary evaluations. In the meantime, the participants emphasized that formative assessment will gain significance and therefore, it should be a part of the system. The measurement and evaluation process is one of the most important elements of curriculum, and this change in society will also affect the education system, whereby making changes in measurement and evaluation processes will be inevitable. According to Baran and Alzoubi (2020), student competencies, which have changed for many reasons over the centuries, should constantly develop through assessment activities, and with this growing change throughout the world, higher-order skills should be included in the assessment process. In the meantime, the study concluded that workshops and reporting held within the scope of curriculum evaluation should take place in digital environments. In the evaluation stage, the participants stated that the views of education stakeholders, namely teachers, students, and parents should be constantly obtained and that the variety of scientific studies should be increased by using different methods and designs. According to Kızılkaya (2021), educational programs are systems that develop under the influence of technology, change with the influence of society, and constantly renew themselves. Therefore, including stakeholders with whom the system has mutual interaction is of great significance. In their study, Vare et al. (2019) also suggested increasing digital assessments and establishing technical counseling centers in higher education. Therefore, one could argue that the resultant findings are consistent with the literature. As a result of the study, when the four stages of curriculum development were examined, the participants emphasized that distance education systems they used still had deficiencies in terms of development and that the infrastructural issues of the system must be resolved. They noted that there may be difficulties with accessing distance education systems used around the world and that systems should be within the inclusiveness framework. Therefore, they stated that all segments and age groups of the country should be taken into account and that all stakeholders of education should be included in the process. At the same time, they emphasized that a platform can be developed as a solution to the increasing workload during the measurement and evaluation process and that stakeholders and groups should be in constant cooperation to observe the impact of these practices. They emphasized that the use of digital opportunities in content production should increase due to the effect of digitalization on education and units undertaking this task in this process should be created. They maintained that to learn about changes and developments in the process and draw a roadmap for evaluating the curriculum, the opinion of stakeholders should be constantly obtained and

the number of scientific studies conducted using different methods and designs within the scope of curriculum development should increase.

A general evaluation of the information obtained from this research clearly shows that digital libraries, e-learning tools, and applications that contribute to teaching-learning environments allow individuals to utilize the rapidly developing technology in education more efficiently and to have quicker access to information. Various teaching-learning activities are delivered through flexible learning environments offered by constructivism-based content management systems, which also make learning more efficient and effective by facilitating access to information. In addition, learning management systems that bridge cooperation and communication between learners and instructors are also teaching tools used for information exchange and learning and are very effective in terms of ensuring diversity. Considering orientations such as various social networks, Web 2.0 and Web 3.0 tools, and MOOC, interactive environments, which increase individual motivation and interest, spread over wider areas, and help cooperative learning to take place, are established and this condition may be important for distance education. As technologies utilized in teaching-learning environments increase, saying that tendencies are growing towards distance education would not be wrong. Various e-learning applications and tools, social networks, and management systems for the increasing interests and needs should be built on solid infrastructure foundations and this, of course, requires constant change and development. Utilization of technology in education, which we will need much more than we do today, is quite important for the next generation and the significant steps taken will greatly affect the future of distance education together with the achievements gained and the needs encountered in technology-based learning.

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